

REMARKS

In the Office Action mailed July 13, 2007, claims 1-29 were pending. Claims 1-8, 12-22, and 26-29 were rejected under 35 U.S.C. § 102(e) as being anticipated by Ishwar et al., Pub. No. US 2004/0017816 (“*Ishwar*”). Claims 9-11 and 23-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishwar et al., Pub. No. US 2004/0017816 (“*Ishwar*”) in view of Kalkunte et al., Pub. No. US 2002/0012345 (“*Kalkunte*”). The Office Action was marked “*Non-Final*”.

Claims 1-8, 12-22, and 26-29 were rejected under 35 U.S.C. § 102(e) as being anticipated by Ishwar. Applicants respectfully traverse this rejection. Further, regarding claims 1 and 15, it was asserted in the Office Action that Ishwar shows “*transmitting packets end-to-end from the first computer to the second computer in a manner characterized that the computer network preserves a connection between the first computer to the second computer without terminating the connection at the inbound edge of the computer network, the packets conforming to protocols in the plurality of transmission protocols*”. It was suggested that “*such system establishes a logical port within a network node that includes a binding to a tunnel, associating the logical port with a VLAN and transmit traffic through network node, therefore such system inherently preserves a connection from the first computer site to the second computer site do to the packet transmission binding with a logical port and VLAN*”. However, this seems to ignore Ishwar FIGs. 3, 4A, 5, 6A, 7, 9A, 10, 11A, and especially 12A which clearly show the connections terminating in the edge devices. FIGs. 12A and 12B are especially illustrative, showing VLAN 100 connecting P1 of Node A to LP_{3,600} and to LP_{MPLS.5000}. According to the cited drawings, the connections are clearly not end to end, but rather, end at the edge, which is specifically what is excluded in

the claims. Also, reinforcing this is that both a stacked VLAN domain and MPLS domain share VLAN 100 connection to C1, but utilize two different edge devices. Also note the bottom of the description for FIG. 3 (paragraph 34) which concludes: *“The first 802.1Q packet is then handled at the far-end SPED like other VLAN packets and is forwarded to all ports in the respective broadcast domain”*. The mention of the broadcast domain between the far-end SPEDs and customer systems is repeated for the rest of the FIGs. showing different variations and embodiments of the Ishwar invention. A *“broadcast domain”* is not end-to-end by its very nature. Compare this to the present disclosure which emphasizes the advantages of end-to-end transmission in paragraphs 17 and 18. This is significant limitation missing in the cited Ishwar reference. Applicants therefore respectfully submit that these claims and all the claims dependent upon them are not anticipated by Ishwar, that the rejection of these claims under 35 U.S.C. § 102(e) is incorrect, and request that this rejection of these claims be withdrawn.

The remainder of the claims rejected under 35 U.S.C. § 102(e) as being anticipated by Ishwar are dependent upon these two claims, and therefore should also be allowable. For this reason, the arguments above are incorporated by reference.

Claims 2, 3, 4, 16, 17, and 18 claim *“to perform Ethernet loadsharing across multiple links”*. This element is missing from the Ishwar reference.

Claims 3 and 17 further claim transmission of the PAgP protocol, and claims 4 and 18 further claim transmission of the UDLD protocol. There is no mention, suggestion, or teaching of either of these protocols in the Ishwar reference.

Claims 5 and 19 further claim *“wherein a unique ISP access VLAN is assigned to each connection between corresponding Etherchannel ports.”* There is

no reason to believe that this is true in the Ishwar reference. Rather, the two channels shown in the cited FIG. are unique because they terminate at different computers.

Claims 6 and 20 further claim “*monitoring the computer network to detect multipoint protocol tunneling*”. FIG. 14 does not mention or teach this limitation. Rather, the Ishwar invention appears to know about the tunneling. Claims 7, 8, 21, and 22 are dependent upon these claims, and again there is no mention of monitoring to detect multipoint protocol tunneling in Ishwar.

Claims 12 and 26 further claim “*wherein a report is generated upon detection of multipoint protocol tunneling*”. No mention is made in the cited portion of Ishwar of generating a report for any reason.

These are further reasons why Applicants respectfully submit that the rejection of these claims under 35 U.S.C. § 102(e) is incorrect, and request that this rejection of these claims be withdrawn.

Claims 9-11 and 23-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishwar in view of Kalkunte. Applicants respectfully traverse this rejection and further incorporate the arguments for overcoming the 35 U.S.C. § 102(e) rejections above herein by reference.

It was asserted that the Kalkunte reference provided the aging claimed in claims 9 and 23. However, the Kalkunte aging process is significantly different. In particular, it states that “*if the entry is found but the port number does not match the ingress port number then the entry stays the same, except that the old port number is replaced by the new ingress port number*” (§ 150). Contrast this with the present invention which specifies: “*Once a remote end point has been accepted as*

the tunneled protocol session partner for the local end point, that remote end point is considered to be the legitimate tunneled protocol session partner unless the remote end point does not comply with the tunneled protocol's transmit requirement consistently, for example, for at least twice the period of the longest tunneled protocol interval. While the MPT detection reference is not aged out (the local end point does not receive any tunneled protocol packets from the established remote end point during an aging timer period), all packets arriving with a source MAC address that differ from the MPT detection reference are dropped. In case the MPT detection reference is aged out, the source MAC address of the next valid packet is used as the new MPT detection reference.” (§ 22). Thus, during the Kalkunte aging, encountering different MAC addresses results in updating the MAC address, whereas in the present invention, during aging, encountering a different MAC address results in the packet being dropped. The two only have the term “aging”, setting a timer, and looking at MAC addresses in common. But what happens as a result differs significantly, and therefore, they are not the same process.

Additionally, it should be noted that the Ishwar reference may suggest the Kalkunte aging process, but cannot suggest the aging process in the present invention because that combination would be inoperable. The aging process in the present invention combined with the Ishwar reference would likely result in hung sessions, since Ishwar supports multiple protocols and connections on the same VLAN channel. Dropping packets would be deadly in such a situation, and thus, Ishwar teaches away from the aging process in the present invention.

Claims 10, 11, 24, and 25 are dependent upon claims 9 and 23, and should be allowable for the same reasons. Further, claims 10 and 24 further clarify the aging process in the present invention. The examiner admits that Ishwar fails to

teach that all packets arriving with a source MAC address other than the reference MAC address are dropped. Kalkunte is cited for this limitation. However, as noted above, Kalkunte changes the reference MAC address instead of dropping packets.

Applicants respectfully submit that the rejection of these claims under 35 U.S.C. § 103(a) as being unpatentable over Ishwar in view Kalkunte has been overcome, that a prima facie case of obviousness has not been made, and therefore respectfully request that this rejection be withdrawn.

Since all claims are therefore allowable, Applicants respectfully request that they be allowed and the application allowed to issue.

If the Examiner has any questions regarding this response or the application, the Examiner is invited to telephone the undersigned at 775-586-9500.

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Respectfully submitted,
SIERRA PATENT GROUP, LTD.

/bruce e. hayden/

Bruce E. Hayden
Attorney for Applicants
Registration No. 35,539
Telephone No. 775-586-9500